

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	223	((satoshi) near2 (furuta)).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/07 21:16
L2	16	L1 and (esterification or ester)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/07 21:16
S1	2	("5508457").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/23 11:08
S4	3	"20020010359"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/22 16:20
S5	4	ep-1505048-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 17:57
S6	2	("6090959").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/22 16:27
S8	2	("6376701").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/22 16:44
S10	27603	transesterification or (trans\$esterification)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/22 16:45

## EAST Search History (Prior Art)

S11	11202	S10 same catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/22 16:46
S12	382	S11 same zirconium	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/22 16:48
S13	302	S12 same (titanium or silicon or aluminum or phosphorus)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 09:52
S14	247	S13 and @Py < "2005"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/22 17:12
S16	28231	esterification same catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 09:48
S17	10099	S16 same ((ester with alcohol) or (acid with alcohol))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 09:50
S18	6213	S16 same (ester with alcohol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 09:50
S19	1375	S18 same (acid adj catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 09:52

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S20	218	S19 same (zirconia or tungsten or zirconium or titanium or silicon or aluminum or phosphorus)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 10:05
S21	14	S20 and ((zirconia or zirconium) near10 (tungsten or zirconium or titanium or silicon or aluminum or phosphorus))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/23 10:07
S22	2	("4938939").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/23 11:08
S23	142615	(ester\$9) same catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:38
S24	11582	(transester\$9) same catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:38
S25	12148	(trans\$ester\$9) same catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:39
S26	68165	(S23 or S24 or S25) same (alcohol or methanol or ethanol or (methyl adj alcohol) or (ethyl adj alcohol))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:41
S27	21500	S26 same (metal or zirconium or Zr or zirconia or ZrO or zirconium\$oxide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:44

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S28	14938	S27 same (boron or aluminum or alumina or gallium or indium or scandium or yttrium or titanium or silicon or silicate or hafnium or phosphorus or tin or antimony or germanium or carbon or arsenic or bismuth or niobium or tantalum)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:53
S29	11145	S28 and (ester with (alcohol or methanol or ethanol or butanol))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 14:56
S30	192028	(oil or fat) with (alcohol or methanol or ethanol)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 15:00
S31	3370	S29 and S30	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:45
S32	201	S31 and (zirconium or zirconia)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 17:30
S33	40	S32 and transesterification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:02
S34	4	("2521742").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/26 16:02
S35	532	S31 and (triglyceride or diglyceride or monoglyceride)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:52

## EAST Search History (Prior Art)

S36	34	S35 and (zirconium or zirconia)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:50
S37	2	ep-198243-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 11:19
S38	4	ep-1505048-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 18:16
S39	2	jp-11269262-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 18:17
S40	2	("7151187").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/30 11:14
S41	2	("7026502").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/30 11:18
S42	1	ep-1448750-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 11:19
S43	2	"2005266139"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 17:30

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S44	2	"20050266139"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 17:30
S45	1	ep-1448750-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:56
S46	1	wo-2003040268-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:49
S47	0	wo-2002098558-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:12
S48	1	wo-200298558-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:14
S49	0	wo-2002042537-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:15
S50	0	wo-20020042537-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:51
S51	0	wo-2002042537-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:15

## EAST Search History (Prior Art)

S52	1	wo-200242537-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:41
S53	2	("6255441").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 18:40
S54	3	"2002087027"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:40
S55	1	"200287027"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:40
S56	0	"2001991653"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:41
S57	0	"20010991653"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:41
S58	1	ep-1181096-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:44
S59	2	("6310236").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 18:44

## EAST Search History (Prior Art)

S60	2	wo-9715382-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:49
S61	2	jp-07258154-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:52
S62	2	("5430178").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 18:52
S63	2	ep-340753-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 18:57
S64	2	("5674801").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 09:27
S65	12818	furuta.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 13:59
S66	491	S65 and ester	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:00
S67	18	S66 and transesterification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:00

## EAST Search History (Prior Art)

S68	15	S67 and catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:01
S69	322	(560/217).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/04 14:15
S70	294	(560/234).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/04 14:16
S71	233	(554/174).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/04 14:16
S72	616	(S69 or S70 or S71) and ester	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:16
S73	291	S72 and esterification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:17
S74	56	S73 and trans	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:18
S75	2	S73 and trans?	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:19

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S76	147	S73 and transesterification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:19
S77	27	S73 and trans?esterification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:20
S78	2	("7211681").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/11 16:19
S79	3	("5760273").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/13 15:02
S80	2	("6887283").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/13 15:03
S81	3	("4032550").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/07/13 15:03
S82	3	"2002013486"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/14 14:00
S83	3	"20020013486"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/14 14:00

## EAST Search History (Prior Art)

S84	221	((satoshi) near2 (furuta)).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/18 13:04
S85	16	S84 and (esterification or ester)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/18 13:05
S86	223	((satoshi) near2 (furuta)).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/26 21:45
S87	16	S86 and (esterification or ester)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/26 21:45

## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	1	(560/217).CCLS.	UPAD	OR	OFF	2010/01/07 21:17
L4	0	(560/234).CCLS.	UPAD	OR	OFF	2010/01/07 21:17
L5	1	(554/174).CCLS.	UPAD	OR	OFF	2010/01/07 21:17
S88	4496	"L1" and (esterification or ester)	USPAT; UPAD	OR	ON	2009/07/26 21:45
S89	2450	S88 and (zirconium or aluminum or titanium)	USPAT; UPAD	OR	ON	2009/07/26 21:47
S90	386	S88 and ((zirconium) and (aluminum or titanium or phosphorous))	USPAT; UPAD	OR	ON	2009/07/26 21:48
S91	122	S90 and amorphous	USPAT; UPAD	OR	ON	2009/07/26 21:49